

## CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number  
**WO 2005/073265 A1**

(51) International Patent Classification<sup>7</sup>: C08G 12/26,  
H01L 33/00, 51/30, C07D 277/28

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(21) International Application Number:  
PCT/CA2005/000131

(22) International Filing Date: 2 February 2005 (02.02.2005)

(25) Filing Language: English

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CR, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

Published:  
— with international search report

(30) Priority Data:  
60/541,259 4 February 2004 (04.02.2004) US

(48) Date of publication of this corrected version:  
29 September 2005

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(15) Information about Correction:  
see PCT Gazette No. 39/2005 of 29 September 2005, Section II

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,



**2005/073265 A1**

(54) Title: CONJUGATED THIOPHENES HAVING CONDUCTING PROPERTIES AND SYNTHESIS OF SAME

(57) Abstract: The present invention relates to conjugated oligomers and polymers comprising aromatic thiophene cores. The conjugated materials are obtained by simple and efficient condensation of an aryl diamine and an aryl dialdehyde or a bifunctional aryl moiety comprising both an aldehyde and an amine. Condensation of the complementary moieties at temperatures ranging from ambient to refluxing temperatures in various solvents resulted in conjugated oligomers and polymers that can subsequently be cast into thin films. Oligomerization and polymerization can be done under mild conditions with removal of the resulting water bi-product